

WHAT IS CLAIMED IS:

1. A method of processing, comprising:
providing a processor having a local memory for storing code;
configuring said local memory into a plurality of blocks of
memory;
providing an external memory for use by said processor;
storing a program of code in said external memory, wherein said
program of code is segmented into blocks of code which can be stored in said blocks of
memory of said local memory; and
storing a first block of code in at least one block of memory of said
local memory.

2. The method of processing as described in claim 1 wherein said
storing said first block of code comprises, storing said first block of code in a memory
space of said local memory comprising a plurality of said blocks of memory.

3. The method of processing as described in claim 1 and further
comprising:
storing a second block of code in said local memory.

4. The method of processing as described in claim 3 and further
comprising:
determining that said first block of code is completely stored into
said local memory; and
initiating execution of said first block of code.

5. The method of processing as described in claim 4 and further
comprising:
determining that at least one block of code in said local memory
has completed execution; and
replacing said executed block of code with a further block of code.

6. The method of processing as described in claim 5 and further
comprising:

3 determining that at least one memory space of said local memory is
4 available;
5 storing a first block of code from a second program in said
6 available memory space of said local memory while said first program code is still
7 executing.

1 7. The method of processing as described in claim 1 and further
2 comprising:
3 utilizing a semaphore to indicate when said memory locations of
4 said local memory are available.

1 8. An apparatus comprising:
2 a processor;
3 a first local memory of said processor;
4 an external memory for use by said processor;
5 a program of code for processing by said processor;
6 wherein said program of code is segmented into blocks of code which can
7 be stored in corresponding memory blocks in said local memory; and
8 wherein memory requirements for storing said program of code are larger
9 than a total portion of said local memory designated for storing said blocks of code.

1 9. The apparatus as described in claim 8 and further comprising:
2 a second local memory of said processor.

1 10. The apparatus as described in claim 9 wherein said second local
2 memory is configured to store data for use by said code stored in said first local memory.

1 11. The apparatus as described in claim 8 and wherein said program of
2 code is disposed in said external memory.

1 12. The apparatus as described in claim 11 and further comprising a
2 second program of code for processing by said processor.

1 13. The apparatus as described in claim 8 wherein said blocks of code
2 of said program of code are stored as a queue for loading into said first local memory.

1 14. The apparatus as described in claim 13 wherein said queue further
2 comprises at least one block of data for loading into said second local memory.

1 15. The apparatus as described in claim 10 and further comprising a
2 semaphore, wherein said semaphore comprises at least one bit for indicating when at least
3 one block of said first local memory is available.

1 16. The apparatus as described in claim 15 and further comprising:
2 a second processor operable for receiving a stream of data
3 formatted for use by a DVD player;
4 a third processor operable for processing video components of said
5 stream of data; and
6 wherein said program of code is operable to process audio components of
7 said stream of data.

1 17. A method of preparing program code for use by a processor having
2 limited local memory, comprising:
3 preparing a program of code for use by a processor having a local
4 memory;
5 determining a fundamental memory block size of said local
6 memory;
7 segmenting said program of code into a plurality of blocks of code
8 for loading into said local memory; and
9 storing said blocks of code in an external memory separate from
10 said processor.

1 18. The method of preparing a program code as described in claim 17
2 and further comprising:
3 arranging said blocks of code into a queue for loading into said
4 local memory of said processor.

1 19. The method of preparing a program code as described in claim 17
2 and further comprising:
3 preparing a second program of code for use by said processor;

